



K A N S A S

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Storing an Emergency Supply of Water

How Should I Store Water?

To prepare safest and most reliable emergency supply of water, it is recommended you purchase commercially bottled water. Keep bottled water in its original container and do not open it until you need to use it. Observe the expiration or "use by" date.

If you are preparing your own containers of water

It is recommended you purchase food-grade water storage containers from surplus or camping supplies stores to use for water storage. Before filling with water, thoroughly clean the containers with dishwashing soap and water, and rinse completely so there is no residual soap. Follow directions below on filling the container with water.

If you choose to use your own storage containers, choose two-liter plastic soft drink bottles – not plastic jugs or cardboard containers that have had milk or fruit juice in them. Milk protein and fruit sugars cannot be adequately removed from these containers and provide an environment for bacterial growth when water is stored in them. Cardboard containers also leak easily and are not designed for long-term storage of liquids. Also, do not use glass containers, because they can break and are heavy.

If storing water in plastic soda bottles, follow these steps

Thoroughly clean the bottles with dishwashing soap and water, and rinse completely so there is no residual soap. Sanitize the bottles by adding a solution of 1 teaspoon of non-scented liquid household chlorine bleach to a quart of water. Swish the sanitizing solution in the bottle so that it touches all surfaces. After sanitizing the bottle, thoroughly rinse out the sanitizing solution with clean water.

Filling water containers

Fill the bottle to the top with regular tap water. If the tap water has been commercially treated from a water utility with chlorine, you do not need to add anything else to the water to keep it clean. If the water you are using comes from a well or water source that is not treated with chlorine, add two drops of non-scented liquid household chlorine bleach to the water. Tightly close the container using the original cap. Be careful not to contaminate the cap by touching the inside of it with your finger. Place a date on the outside of the container so that you know when you filled it. Store in a cool, dark place. Replace the water every six months if not using commercially bottled water.

(From the American Red Cross)

What kinds of containers are recommended to store water in?

Make sure the water storage container you plan to use is of food grade quality, such as 2-liter soda bottles, with tight-fitting screw-cap lids. Milk containers are not recommended because they do not seal well.

Should water be treated before storing it?

If your local water is treated commercially by a water treatment utility, you do not have to treat the water before storing it. Treating commercially treated water with bleach is superfluous and not necessary. Doing so does not increase storage life. It is important to change and replace stored water every six months or more frequently.

Fourteen gallons of water per person is the suggested amount to store for a two-week emergency situation. One thing to note is that this amount is enough for subsistence purposes only, 2 quarts. For drinking and 2 quarts for cleaning and bathing purposes a day. When you consider that a person normally uses in excess of 140 gallons of water per day for drinking, bathing, laundry, dishes, watering lawns, etc. this isn't a lot of water. If you have the room to store more you probably will want to do so.

The easiest way to store the bulk of your water is in 55 gallon, polyethylene (plastic) water drums. These can be obtained from most food storage companies or from local container companies found in the yellow pages. It is important that you use only food grade, good quality containers. Many times you can get food grade containers from companies that distribute beverages or syrups. If you clean them well, they can provide a good container that costs considerably less. One word of caution, however, often the taste or odor of the previous contents has leached into the plastic and over time may be reintroduced to your water. If you plan to use previously used containers make sure that what it had in it before is something you wouldn't mind tasting or smelling in your water. Most water containers come in 5 gallon, 15 gallon or 55-gallon sizes. I always suggest that a family stores between two and six of these smaller containers along with their 55-gallon drums. This is a prudent suggestion in situations where you might need to transport water, in the normal course of events or in a situation where your normal water source might be disrupted, such as after an earthquake, hurricane, etc., and you might have to go to a secondary water source such as a water truck, stream, etc. to refill. Water weighs approximately 8 lbs. per gallon. Fifty- five-gallon drums are much too heavy to handle (440 lbs.) and awkward. Smaller containers don't hold enough water and would require too many trips, especially if you have to go on foot. Five 15-gallon containers are more practical and can easily be put into a wheelbarrow or child's wagon and wheeled to and from an area.

Two-liter pop bottles make a good container for additional water storage and cost nothing if you save them and fill them with water as you empty them. To economize many people are tempted to use empty milk jugs, but don't plan to store water in these for more than 3-4 months. They are biodegradable and will break down within 6 months. Not only may you lose your water, but also if they are stored near food or other items, they may damage them. Heavy containers should always be stored close to ground level and secured to prevent breakage or possible injury in the event of earthquake, etc. Be sure to store your water away from any harmful chemicals or objectionable smelling products.

Culinary water (tap water) is what is usually stored for long-term storage. If you have a clean, opaque container where the light cannot get through and your water is bacteria-free when you store it you probably don't need to treat it further. Under these conditions the water actually gets more pure as it is stored. However, for most of us there is no guarantee that our culinary water is bacteria-free and most of us prefer to treat our water in some way as a precaution as we store it. Several methods have traditionally been used to purify water for long-term water storage:

1. **Two percent Tincture of Iodine** -- To use this, add 12 drops per gallon of water. Note: pregnant or nursing women or people with thyroid problems should not drink water with iodine.

2. **Chlorine Bleach** -- Household bleach can also be used. This should contain a 5.25 percent solution of sodium hypochlorite without soap additives or phosphates. Use 1/8 teaspoon (About 5-8 drops) per gallon of water.